

**STATE OF VERMONT  
PUBLIC UTILITY COMMISSION**

Petition of Chelsea Solar LLC, pursuant to )  
30 V.S.A. § 248, for a certificate of public )  
good authorizing the installation and )  
operation of the “Chelsea Solar Project,” a )  
2.0 MW solar electric generation facility )  
located off Willow Road in Bennington, )  
Vermont )

Docket No. 17-5024-PET

**REBUTTAL TESTIMONY OF BRAD WILSON**  
**ON BEHALF OF PETITIONER**

August 10, 2018

## **EXHIBITS**

|                  |   |
|------------------|---|
| Exhibit CS-BW-82 | Photos of Kobelia Solar Project   |
| Exhibit CS-BW-83 | Photos of Bennington Substation   |
| Exhibit CS-BW-84 | Bennington Planning Commission Minutes  |
| Exhibit CS-BW-85 | MOU and Letter to PUC from Town of Bennington in support of Bennington Substation Project |
| Exhibit CS-BW-86 | Bennington Town Plan Energy Amendment   |
| Exhibit CS-BW-87 | Bennington Solar Preferred Sites Map w/ markup  |
| Exhibit CS-BW-88 | 2012 Bennington Municipal Energy Plan   |
| Exhibit CS-BW-89 | Aerial View of Project Site and Apple Hill Neighborhood                                   |
| Exhibit CS-BW-90 | Letter from Town in Support of ER Bennington Project                                      |
| Exhibit CS-BW-91 | Figure 3 of Exhibit AHS-MK-2 in PUC Docket 8454   |
| Exhibit CS-BW-92 | 10.13.15 Letter to PUC from Bennington Select Board                                       |
| Exhibit CS-BW-93 | Transcript of 08.18.15 Hearing in PUC Docket 8454   |
| Exhibit CS-BW-94 | Specifications and Photos of Fence Screening Material                                     |

1 **Q1. Please state your name, occupation, and business address.**

2 A1. My name is Brad Wilson. I am a Project Developer at Ecos Energy LLC (“Ecos”). My  
3 business address is 222 South 9th Street, Suite 1600, Minneapolis, Minnesota 55402.

4

5 **Q2. What is the purpose of your testimony?**

6 A2. This supplemental testimony provides information in response to certain claims that have  
7 been made in the recent testimony filed by David Raphael (“Raphael”), Dan Monks (“Monks”),  
8 Libby Harris (“Harris”), Lora Block (“Block”), and Maru Leon (“Leon”) in this docket.

9

10 **Q3. Have you reviewed the June 22, 2018 testimony and associated exhibits of David**  
11 **Raphael in this docket?**

12 A3. Yes. Raphael’s testimony and exhibits deal primarily with the topics of aesthetics and  
13 orderly development of the region. Mark Kane and Michael Buscher will file rebuttal testimony  
14 in response to Raphael’s analysis. There are also some elements of Raphael’s testimony that I will  
15 respond to in the answers directly below.

16

17 **Q4. Does Raphael state the correct location for the Project’s proposed grid**  
18 **interconnection?**

19 A4. No. In Raphael’s Assessment and Review of Aesthetics and Orderly Development for the  
20 Proposed Chelsea Solar Project (*Exhibit PSD-DR-2*) (“Raphael’s report”), he states:

1 “the power will be conveyed along new poles [...] that will run for approximately 1 mile  
2 along Willow Road, Hewitt Drive and to the proposed point of interconnection on East  
3 Road.” (Page 2)

4 This statement is incorrect. My November 27, 2017 prefiled testimony in this docket (my “original  
5 PFT”) states on Page 5 that the Project’s interconnection will be located within the Project footprint  
6 (at the southeastern corner), within the Project Site boundaries. The correct location of the  
7 Project’s point of interconnection (“POI”) is important because the POI is the defined boundary  
8 between Project infrastructure and public utility infrastructure owned by the interconnecting  
9 utility.

10

11 **Q5. Is the Project Site located in the Apple Hill Neighborhood?**

12 A5. No. On Page 8 of his report, Raphael claims that the Project Site “serves as an integral  
13 land use boundary for the residences in the Apple Hill neighborhood [...]” On the same page,  
14 Raphael also claims that the Project Site “could aesthetically be considered a part of the [Apple  
15 Hill] neighborhood [...]” The Apple Hill neighborhood (the “Neighborhood”) is a residential  
16 subdivision that was created in the 1970s and includes the residences that make up the Apple Hill  
17 Homeowner’s Association (“AHHA”). While the Project Site is adjacent to a small number of  
18 parcels that are part of the Neighborhood, the Project Site is not located within or otherwise a part  
19 of the Neighborhood. The Project Site has never been a part of the Neighborhood. Furthermore,  
20 there is no language in any Town Plan or other Town document that identifies or describes the  
21 Project Site as any kind of boundary, buffer, or ‘bright line’ for the Neighborhood. Such language

1 is also not found in any deed or within the formation documents for the subdivision that created  
2 the Neighborhood.

3

4 **Q6. Is the Project Site designated as Open Space in the Town of Bennington’s Parks and**  
5 **Open Space Plan?**

6 A6. No. The Town of Bennington has developed a Parks and Open Space Plan that specifically  
7 addresses the topic of designated Open Space within the Town (see *Exhibit CS-BW-49*). The  
8 Parks and Open Space plan includes a map of land within the Town that the Town has designated  
9 as Open Space, and it also includes a list of recommendations for future planning. The Project  
10 Site is not designated as Open Space anywhere in the Parks and Open Space Plan. The Parks and  
11 Open Space Plan also includes a list of recommendations for future Open Space planning, and  
12 there are no recommendations that the Project Site be designated as Open Space in the future. The  
13 Parks and Open Space Plan also states, “The inventory section of this report demonstrates that  
14 Bennington already has a wealth of conserved open space [...]” (Page 8).

15

16 **Q7. Is the highway area to the south and west of the Apple Hill Neighborhood noticeable**  
17 **from the Apple Hill Neighborhood?**

18 A7. Yes. On Page 9 of his report, Raphael states:

19 “Even though they are only several hundred feet away, the highway and commercial areas  
20 are not visible or noticeable [from the Apple Hill Neighborhood].”

21 While I do not claim to speak for the residents of the Neighborhood, the residents of the  
22 Neighborhood that are participating in this case have been adamant that vehicle noise from the

1 highway is something that is audible throughout the Neighborhood and that the vehicle noise from  
2 the highway is something that concerns them greatly. This was stated in the prefiled testimony of  
3 both Libby Harris and Lora Block in this docket. Harris described the noise as “serious,” “loud,”  
4 and “grating.” Because of this testimony (as well as other previous statements made by  
5 Neighborhood residents), I believe Raphael is incorrect to state that the highway is not noticeable  
6 from the Neighborhood.

7

8 **Q8. Is the view shown in the photo on Page 10 of Raphael’s report taken from the end of**  
9 **Apple Hill Road?**

10 A8. No. The photo shown on Page 10 of Raphael’s report is taken from the northern portion  
11 of the ‘orchard property’ that is adjacent to the Project Site and sits generally between the Project  
12 Site and the parcel owned by Libby Harris. In the caption for the photo, Raphael states that this  
13 photo shows, “The view looking southeast from the end of Apple Hill Road [...]” Raphael’s  
14 caption is incorrect. Raphael’s caption refers to a location that is actually at the end of a 520 foot  
15 long gravel driveway, which is a private access drive that connects to Apple Hill Road at the  
16 opposite end. By claiming this view is taken from Apple Hill Road, Raphael risks creating the  
17 false impression that the Project Site is visible from Apple Hill Road, which is a public road in the  
18 Neighborhood. In truth, the Project Site is not visible from Apple Hill Road or any other public  
19 road in the Neighborhood.

20

21

1 **Q9. Does the Town allow uses other than agriculture, forestry, and very low density single**  
2 **family residential development in the RCON district?**

3 A9. Yes. In regards to the RCON district, the Town Plan states, “Agriculture, forestry, very  
4 low density single-family residential development, and certain limited uses that are suitable in  
5 rural areas are permitted in the district” (Page 26). Referring to this passage from the Town Plan,  
6 Raphael claims on Page 21 of his report that:

7 “the statement ‘Agriculture, forestry, very low density single-family residential  
8 development, and certain limited uses,’ without defining what certain limited uses means,  
9 leaves the door open for interpretation and debate on the types of uses that are appropriate  
10 in this district.”

11 But debate is not needed; the Town has specifically indicated other types of uses that are  
12 appropriate in the RCON district. In the Town Land Use Regulations, which implement the Town  
13 Plan, a number of other allowed uses are listed for the RCON district, including mining/quarrying  
14 operations, golf courses, sawmills, colleges and universities, and electric facilities. The Project is  
15 an electric facility. (See *Exhibit CS-BW-27*, Pages 19, 53-54, 92-93). Moreover, the Town has  
16 approved several other commercial scale ground-mounted solar projects within the RCON district  
17 (*see e.g.* A12 herein).

18

19

20

21

1 **Q10. Are power generation facilities that are used exclusively for public purposes by a**  
2 **regulated utility an allowed use in the RCON district?**

3 A10. Yes. In the Town Land Use Regulations, which implement the Town Plan, “Public  
4 Facility” is listed as an allowed use in the RCON district (Table 3.13, Page 53). On Page 54,  
5 Subsection E of Table 3.13 states:

6 “Public Facilities shall be limited to public utilities (e.g., electric facilities), resource based  
7 activities associated with other municipal activities (e.g., highway maintenance facilities).”

8 The Project is an electric facility. On Page 35 of his report, Raphael argues that this reference to  
9 ‘electric facilities’ may not cover energy generation facilities such as the Project. He states:

10 “Allowable uses may include an ‘electric facility’ but it is not articulated as an energy  
11 generation or transmission facility [...] [I]n this district such a facility could be a substation  
12 or an electrical component related to an agricultural or residential use.”

13 Raphael is incorrect; the Town Land Use Regulations do articulate that ‘Public Facilities’ includes  
14 power generation facilities such as the Project. On Page 19 of the Town Land Use Regulations,  
15 ‘Public Facility’ is defined as:

16 “**A** utility or other **facility** owned, leased, held, **used**, an/or controlled **exclusively for**  
17 **public purposes by a** municipal, state or federal government, **regulated utility** or railroad.  
18 **Such facilities include**, but may not be limited to: municipal buildings and garages, water  
19 and wastewater facilities, **power generation** and transmission **facilities**, institutional  
20 facilities, recreational facilities and telephone, cable and electrical distribution lines.”

21 (emphasis added)

1 The Project is a power generation facility connected directly to the public utility grid and whose  
2 entire output will be used for public purposes by regulated utilities.

3

4 **Q11. Does the RCON district contain other examples of non-residential and non-**  
5 **agricultural development??**

6 A11. Yes. On Page 34 of his report, Raphael states:

7 “This district [RCON], except for the highway infrastructure to the south, is a distinctly  
8 rural, non-industrial landscape with a low density development character that lacks the type  
9 of physical intrusion and footprint that this project represents.”

10 This statement is simply untrue. There are at least two other commercial-scale solar projects that  
11 have been approved by the PUC and are currently operating in the RCON; the Kobelia Bennington  
12 GLC Solar Project (PUC Docket No. NMP-6523) and the Paper Mill Solar Project (Docket No.  
13 16-0049-NMP). The RCON also contains a number of other non-residential and non-agricultural  
14 development projects that are similar to or exceed the footprint of the Project, including the  
15 VELCO Bennington Substation Project (PUC Docket No. 7763), the Mount Anthony Union  
16 Middle School, an EPA Superfund landfill site, and commercial buildings along Route 9. Raphael  
17 does acknowledge the existence of other solar projects in the RCON district; on Page 34 of his  
18 report, he states:

19 “It is true that solar development has been permitted elsewhere in the Rural Conservation  
20 District, which includes several distinct areas mostly north of the commercial and industrial  
21 core of the town.”

1 However, Raphael does not explain why the Project, which is located on the border of the  
2 commercial and industrial core of the Town should be treated differently than other solar  
3 generating facilities approved by the Town and built in the RCON.

4  
5 **Q12. Is the Kobelia Bennington GLC Solar Project located in the RCON district?**

6 A12. Yes. The Kobelia Bennington GLC Solar Project (PUC Docket No. NMP-6523) (the  
7 “Kobelia Project”) is located along Route 9 in Bennington within the RCON district. The Kobelia  
8 Project is a 500 kW (AC) commercial-scale ground-mounted photovoltaic solar electric generation  
9 facility. I have visited the Kobelia Project in person. A photo of the Kobelia Project is included  
10 as *Exhibit CS-BW-82*. The Kobelia Project is visible from Route 9. The Kobelia Project was  
11 reviewed and approved under the same version of the Town Plan that applies to the Chelsea Solar  
12 Project. The PUC issued a final order for the Kobelia Project on October 14, 2015 which found  
13 that the Kobelia Project did not unduly interfere with orderly development of the region and that  
14 there were no land conservation measures contained in the Town Plan that would prohibit  
15 development in the area where the Kobelia Project is now currently located (again, the Kobelia  
16 Project is located in the RCON district). Also very important is the fact that the Town of  
17 Bennington was sent a full copy of the Kobelia’s Project CPG application and supporting materials  
18 on August 12, 2015, which is precisely the same time period that the Bennington Select Board  
19 voted to begin its opposition to the Chelsea Solar Project (at a special meeting called specifically  
20 to discuss the Chelsea Solar Project on August 13, 2015). There is no question that the Kobelia  
21 Project’s application was received by the Town at a time when the topic of appropriate siting for  
22 solar projects was at the forefront of the minds of the Town’s decision makers. The Town did not

1 intervene in the Kobelia Project's 248 proceeding or file any briefs or comment letters with the  
2 PUC. The Town did not oppose the Kobelia Project.

3

4 **Q13. Is the Paper Mill Solar Project located in the RCON district?**

5 A13. Yes. The Paper Mill Solar Project (PUC Docket No. 16-0049-NMP) (the "Paper Mill  
6 Project") is located along Murphy Road in Bennington within the RCON district. The Paper Mill  
7 Project is a 500 kW (AC) commercial-scale ground-mounted photovoltaic solar electric generation  
8 facility. I have visited the Paper Mill Project in person. Photos of the Paper Mill Project were  
9 submitted previously as *Exhibit CS-BW-21*, and I have previously discussed the Paper Mill Project  
10 in my original PFT (Question 21 beginning on Page 17). The Paper Mill Project is plainly visible  
11 from Murphy Road. The Paper Mill Project was reviewed and approved under a more recent  
12 version of the Town Plan than the version that applies to the Project, but both versions contain  
13 nearly identical language regarding the purpose and requirements of the RCON district. The PUC  
14 issued a final order for the Paper Mill Project on November 17, 2016 which found that the Paper  
15 Mill Project did not unduly interfere with orderly development of the region and that it did not  
16 violate a clear written community standard in the Town Plan intended to preserve the aesthetics or  
17 scenic beauty of the area. The Town was sent a full copy of the Paper Mill Project's CPG  
18 application and supporting materials on September 29, 2016. The Bennington Planning  
19 Commission reviewed the Paper Mill Project on October 3, 2016. The Bennington Select Board  
20 held a public hearing to review the Paper Mill Project on October 10, 2016. The Bennington Select  
21 Board then held a special meeting on October 12, 2016 to make a site visit to the proposed location  
22 of the Paper Mill Project. I think it would be fair to categorize the Town's review of the Paper

1 Mill Project as comprehensive, and I don't think there is any question that the Town's decision  
2 makers were fully aware that the Paper Mill Project was proposed to be located in the RCON  
3 district. However, the Town did not oppose the Paper Mill Project. Quite the opposite, the Select  
4 Board voted to send a letter supporting the Paper Mill Project to the PUC, indicating that the Town  
5 had found no adverse impacts with that project's proposal (a copy of that letter was previously  
6 submitted as *Exhibit CS-BW-20*). I would also note that the developer for the Paper Mill Project  
7 (Encore Renewable Energy) is the same developer that had previously entered into an agreement  
8 with the Town, which was financially beneficial to the Town, for the Town to purchase net-  
9 metering credits at a discount from Encore's ER Bennington I Solar Project (PUC Docket No. 16-  
10 0044-NMP).

11

12 **Q14. Is the VELCO Bennington Substation located in the RCON district?**

13 A14. Yes. The VECLCO Bennington Substation Project (PUC Docket No. 7763) (the  
14 "Bennington Substation") is located off of Bedrock Road in Bennington within the RCON district.  
15 The Bennington Substation is a 115 kV / 69 kV / 46 kV electric transmission substation containing  
16 structures up to 54 feet in height. Construction of the Bennington Substation required  
17 approximately 15 acres of clearing in a previously wooded area of the RCON district. I have  
18 visited the Bennington Substation in person. Photos of the Bennington substation are included as  
19 *Exhibit CS-BW-83*. The Bennington Substation was reviewed and approved under the same  
20 version of the Town Plan that applies to the Chelsea Solar Project. The PUC issued a final order  
21 for the Bennington Substation on August 17, 2012 which found that the Bennington Substation  
22 did not unduly interfere with orderly development, that it was consistent with the Town Plan, and

1 that it did not violate a clear written community standard in the Town Plan intended to preserve  
2 the aesthetics or scenic beauty of the area. The Town was sent a full copy of the Bennington  
3 Substation's CPG application and supporting materials on August 16, 2011. According to the  
4 approved minutes of the Bennington Planning Commission, the Bennington Substation project  
5 was comprehensively reviewed by the Bennington Planning Commission and discussed at the  
6 Planning Commission meetings on July 6, 2011; July 20, 2011; August 3, 2011; and September 7,  
7 2011 (see included *Exhibit CS-BW-84*). On September 23, 2011, the Bennington Select Board  
8 filed with the PUC an executed memorandum of understanding in support of the Bennington  
9 Substation as well as a separate letter in support of the Bennington Substation (see included  
10 *Exhibit CS-BW-85*). I think it is fair to assume that the Town's decision makers would have been  
11 fully aware that the Bennington Substation was proposed to be located in the RCON district. The  
12 Town did not oppose the Bennington Substation; quite the opposite, the Town actively supported  
13 it.

14

15 **Q15. Is the Apple Hill Solar Project located in the RCON district?**

16 A15. Yes. The Apple Hill Solar Project (PUC Docket No. 8454) (the "Apple Hill Project") is a  
17 proposed 2.0 MW (AC) commercial-scale ground-mounted photovoltaic solar electric generation  
18 facility located off of Willow Road in Bennington within the RCON district. The Apple Hill  
19 Project is proposed as a separate facility on a different portion of the same parcel of land as the  
20 Chelsea Solar Project. The Apple Hill Project has nearly identical characteristics to the Chelsea  
21 Solar Project, including materials, location, aesthetics mitigation, and physical footprint. The  
22 Apple Hill Project is currently under consideration for approval by the PUC. I testified on behalf

1 of the Petitioner for the Apple Hill Project. In 2017, the Bennington Select Board held a series of  
2 multi-hour public meetings to decide its position on the Apple Hill Project. The Select Board was  
3 well aware that the Apple Hill Project was proposed in the RCON district. On August 14, 2017,  
4 the Select Board adopted the recommendation of the Town attorney and voted to cease its prior  
5 opposition to the Apple Hill Project. A transcript of the August 14, 2017 was previously included  
6 as *Exhibit CS-BW-12*. Prior to the Select Board's vote, the Town attorney advised:

7 "I never read the Town Plan as prohibiting all alternative energy everywhere in the  
8 [RCON] district. I think that what [Apple Hill Solar] have done is consistent with what I  
9 see as the text of the Town Plan." (Page 38).

10 The Town attorney also advised:

11 "the Town Plan I do not think can credibly be construed to bar alternative energy projects  
12 in the rural [conservation] district because of the preceden[ts], because of the language of  
13 the plan, because of the way zoning by-laws allow specific uses in that area and because  
14 of the planning that's been underway for the future that includes a number of properties in  
15 that area for solar energy." (Page 21).

16 Also regarding the Apple Hill Project, Dan Monks (Bennington Planning Director and Assistant  
17 Town Manager) was the Town's designated representative for a Rule 30(b)(6) deposition  
18 conducted on September 29, 2017. A transcript of the Monks deposition was previously included  
19 as *Exhibit CS-BW-25*. During a line of questioning in the deposition, beginning on Page 5 and  
20 running through Page 7, Monks acknowledges that the Town Plan does not contain any language  
21 that excludes or disallows commercial solar facilities in the RCON district.

22

1 **Q16. Does the Town’s recently adopted map of preferred sites for commercial-scale solar**  
2 **projects include sites in the RCON district?**

3 A16. Yes. The Town adopted an energy plan amendment to the current Town Plan on January  
4 22, 2018 (included as *Exhibit CS-BW-86*). This amendment includes a map of preferred sites for  
5 commercial-scale solar projects (projects in excess of 150 kW rated capacity). According to the  
6 amendment, “This map identifies sites which have been determined by the Town of Bennington,  
7 through official action of the Select Board, to be suitable for solar facilities and sites which are  
8 preferred sites for solar energy generating facilities.” (Page 22). The map is shown on Page 30 of  
9 the amendment. A marked-up version of the map is included as *Exhibit CS-BW-87*; in this version  
10 I have added alphabetical markers to certain preferred site parcels so they can be referenced more  
11 easily. On the map, seven of the parcels that have been identified by the Town as preferred sites  
12 for commercial-scale solar projects are located in the RCON district (please refer to the parcels  
13 labeled A through G on *Exhibit CS-BW-87*). Together, these seven parcels contain approximately  
14 220 acres that have been identified as preferred for commercial-scale solar projects. These 220  
15 acres account for over 40% of all the preferred site acres that were designated by the Town, and it  
16 is more acreage than has been designated in any other land use district, including the Industrial  
17 district. I would also note that all seven parcels are owned by the Town of Bennington. While it  
18 is certainly the case that the January 22, 2018 Town Plan amendment does not apply to this review  
19 of the Chelsea Solar Project, I think it is important to observe that the Town’s recently adopted list  
20 of preferred sites includes multiple parcels in the RCON district.

21

22

1 **Q17. Why are the aforementioned commercial developments within the RCON district**  
2 **material to these proceedings?**

3 A17. In Question 12, I discussed the Kobelia Solar Project, which is located in the RCON district  
4 and was not opposed by the Town. In Question 13, I discussed the Paper Mill Solar Project, which  
5 is located in the RCON district and was actively supported by the Town. In Question 14, I  
6 discussed the Bennington Substation, which is located in the RCON district and was actively  
7 supported by the Town. In Question 15, I discussed the Apple Hill Solar Project, which is proposed  
8 to be located in the RCON district and is not opposed by the Town (by deliberate decision). In  
9 Question 16, I discussed the Town’s recently adopted map of preferred sites for solar projects,  
10 which includes multiple parcels in the RCON district. I believe these examples, taken together,  
11 stand in direct rebuttal to Raphael’s claim that the Project, “creates an industrial affect to the land  
12 use which is clearly prohibited in [the RCON] district.” (Raphael’s report, Page 36). A notion that  
13 the Project is inconsistent with the purpose of the RCON district runs throughout the entirety of  
14 Raphael’s analysis. In their own testimony in this docket, Mark Kane and Michael Buscher have  
15 explained why this is not the case, based upon analysis of what the Town Plan language actually  
16 says. I offer these examples as supporting material to demonstrate that the Town itself has, on  
17 multiple occasions, agreed that the type of land use represented by the Project is appropriate for  
18 and permitted in the RCON district.

19  
20  
21

1 **Q18. Does the Town Plan contain objectives, goals, policies, or recommendations that**  
2 **support the Project?**

3 A18. Yes. On pages 21 through 24 of his report, Raphael quotes a number of objectives, goals,  
4 policies, or recommendations from the Town Plan that relate to land use, development patterns,  
5 and scenic resources. Raphael does not, however, consider the objectives, goals, policies, or  
6 recommendations contained in the Town Plan (*Exhibit CS-BW-81*) that directly support the  
7 Project, including:

- 8 1) “Support appropriate utilization of local natural resources for economic and renewable  
9 energy development while ensuring that any resource extraction is accomplished in an  
10 environmentally sensitive manner.” (Page 2)
- 11 2) “Promote the safe and efficient use of energy and utilization of renewable energy resources.  
12 Support efforts to develop renewable energy facilities, a smart grid, and other technologies  
13 that will help the area meet a significant share of its energy needs.” (Page 3)
- 14 3) “The economic sectors and needs identified earlier in this chapter will remain important to  
15 the community, but will need to be adapted over time to take advantage of opportunities  
16 offered by things such as local renewable energy resources [...]. Key points in the  
17 development of a sustainable local economy include: [...] Produce as much of the  
18 community’s energy demand as possible using local resources [...]” (Page 12)
- 19 4) “Actively promote the energy-related benefits of town policies that: [...] Support  
20 development of renewable energy resources;” (Page 95)
- 21 5) “Create and support programs and facilities that provide stable, affordable, and clean  
22 renewable sources of energy, including wood (and other biomass), wind, water

1 (hydroelectric), solar, and geothermal. Give strong consideration to the energy needs of  
2 the community when evaluating the environmental and economic affects of such programs  
3 and facilities.” (Page 96)

4  
5 **Q19. Does the Town Energy Plan contain objectives, goals, policies, or recommendations**  
6 **that support the Project?**

7 A19. Yes. The Bennington Municipal Energy Plan (included as *Exhibit CS-BW-88*) includes a  
8 number of objectives, goals, policies, or recommendations that directly support the Project,  
9 including:

- 10 1) The Municipal Energy plan states that one of the Town’s goals is, “Developing sustainable,  
11 local renewable energy resources.” (Page 1)
- 12 2) “Electricity supplied from distant generating facilities also will be more limited, resulting  
13 in a need to produce more electricity within our region [...]” (Page 2)
- 14 3) “Some of our future energy needs can be satisfied through reliance on local sources of  
15 energy. Alternative energy sources such as solar, wind, hydroelectric, and biomass-based  
16 fuels can provide significant amounts of clean energy well into the future. Developing  
17 these resources is extremely important [...]” (Page 2)
- 18 4) “The inevitable transition from nonrenewable to renewable energy must focus on local  
19 resources because renewable energy sources have relatively low energy densities compared  
20 to fossil and nuclear fuels, meaning that energy loss through acquisition, processing, and  
21 transport must be minimized.” (Page 38)

- 1       5) “Available resources that potentially can provide for some of the area’s energy needs  
2       include: biomass (wood and field crops), water (hydroelectric), wind, and direct solar  
3       radiation. In addition to supporting local businesses and keeping energy dollars circulating  
4       in the local economy, utilization of these renewable resources would provide significant  
5       environmental benefits by reducing the amount of pollutants emitted by fossil fuel  
6       combustion, reducing energy lost through long-distance transmission, and supporting good  
7       management of natural resources. Developing those resources now also will help provide  
8       energy security for the community, assuring availability of the energy needed to sustain  
9       economic prosperity well into the future.” (Page 38)
- 10       6) “The potential for developing and utilizing locally derived biomass, hydroelectric, wind,  
11       and solar energy is considerable.” (Page 38)
- 12       7) “Rising costs and uncertainties associated with future supplies of nonrenewable fossil fuels  
13       make it imperative that concerted efforts be made to [...] develop new sources of local  
14       renewable energy.” (Page 44)
- 15       8) Included in the list of ‘Recommended Actions’ is: “Consider hosting a solar energy project  
16       at the town’s capped landfill site.” (Page 47) The Town’s capped landfill site is located in  
17       the RCON district.

18

19

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21

1 **Q20. Does the Regional Plan contain objectives, goals, policies, or recommendations that**  
2 **support the Project?**

3 A20. Yes. The Bennington County Regional Plan (included as *Exhibit CS-BW-79*) includes a  
4 number of objectives, goals, policies, or recommendations that directly support the Project,  
5 including:

6 1) “Encourage the efficient use of energy and the development of renewable energy resources.  
7 Energy planning should emphasize the use of diverse and reliable supplies of energy  
8 resources in an efficient and environmentally sound manner. Particular attention should  
9 be given to the development of renewable energy resources in the area [...]” (Page 6)

10 2) “Encourage the development of renewable energy resources.” (Page 65)

11

12 **Q21. Does the Regional Energy Plan contain objectives, goals, policies, or**  
13 **recommendations that support the Project?**

14 A21. Yes. The Bennington County Regional Energy Plan (included as *Exhibit CS-BW-80*)  
15 includes a number of objectives, goals, policies, or recommendations that directly support the  
16 Project, including:

17 1) “Assure diversity in the mix of energy sources to minimize the impacts of a supply  
18 restriction in any particular fuel.” (Page 8)

19 2) “Decrease our reliance on non-local energy sources through conservation and development  
20 and use of local renewable energy sources.” (Page 8)

21 3) “Such present day objectives as watershed protection, [...] will need to be partially retracted  
22 to make way for the compelling future demand for energy.” (Page 32)

- 1       4) “We must transition from nonrenewable to renewable energy sources, and because of net  
2       energy constraints resulting from acquisition, processing, and transportation of energy,  
3       much of that renewable energy will need to be derived from local sources.” (Page 34)
- 4       5) “The value of energy conservation and development of renewable energy resources should  
5       be given significant weight when evaluating new projects and programs.” (Page 51)
- 6       6) “Recognize and support economically and environmentally sound development of the  
7       region’s renewable energy resources.” (Page 52)

8

9       **Q22. Is the Project proposed without any retained existing vegetation?**

10      A22. No. On Page 24 of his report, Raphael evaluates whether or not the Project would offend  
11      the sensibilities of the average person. He states that the Project “will not be offensive to the  
12      sensibilities of the average person” primarily due to the buffer areas of retained existing vegetation  
13      that have been proposed. In the same paragraph, Raphael then states that the Project “would  
14      definitely be considered an offensive, disharmonious development” if the aforementioned buffer  
15      areas did not exist. Raphael’s evaluation of a design scenario that has not been proposed (one  
16      without buffer areas) is potentially confusing. To be clear, the buffer areas **are** an element of the  
17      design that has been proposed for the Project.

18

19      **Q23. Is the Project Site an intact green backdrop for the Welcome Center’s front yard  
20      view?**

21      A23. No. On Page 24 of his report, Raphael describes the Project Site as “an intact, green  
22      backdrop for the Welcome Center’s ‘front yard’ view.” I have visited the Route 7/279 Interchange

1 Vermont Welcome Center many times, and I disagree with Raphael’s characterization of the  
2 Project Site from the Welcome Center. The Welcome Center is designed with large viewing  
3 windows oriented in a certain direction to highlight a particular scenic view; that is the view in the  
4 southwestern direction towards the Bennington Battle Monument and Mount Anthony. That is the  
5 view that the Welcome Center was designed to highlight for its visitors. The Project Site, however,  
6 is oriented in generally the opposite direction, and it is viewed while exiting the Welcome Center  
7 over a foreground of a large concrete parking lot, lighting poles, and highway interchange  
8 infrastructure.

9

10 **Q24. Will the Project be visible from the exit door of the Welcome Center?**

11 A24. No. On Pages 24 and 25 of his report, Raphael discusses the impact the Project “could”  
12 have if it were visible from the Welcome Center. To be clear, the Project will **not** be visible from  
13 the Welcome Center, as has been demonstrated in the testimony submitted by Mark Kane and  
14 Michael Buscher in this case.

15

16 **Q25. From how many residences in the Apple Hill Neighborhood is the Project footprint**  
17 **area currently visible?**

18 A25. There are at least 34 residences in the Apple Hill Neighborhood. I have visited the Project  
19 Site area and Neighborhood area multiple times, and I have observed that only five of those  
20 residences currently have any possible visibility of the footprint area where the Project would be  
21 installed. This is fewer than 15% of the residences in the Neighborhood. These current potential  
22 views from those residences are all at distances exceeding hundreds of feet and most are filtered

1 through significant amounts of wooded vegetation (that would be not be cleared for the Project).  
2 The Project footprint area is also not visible from any public road in the Neighborhood. On Page  
3 25 of his report, Raphael argues that development of the Project would result in a “consequent  
4 change in the landscape character of the neighborhood,” and that it would “change the current  
5 scenic quality” of the Neighborhood. I disagree with Raphael’s conclusion here. As the Project  
6 footprint area is completely imperceptible from the overwhelming majority of residences in the  
7 Neighborhood as well as from all public roads in the Neighborhood, it is not reasonable to claim  
8 that future changes to the Project Site would affect the character or scenic quality of the  
9 Neighborhood as a whole. For reference, a map showing how the Project footprint area is situated  
10 compared to the entire Apple Hill Neighborhood is included as *Exhibit CS-BW-89*.

11

12 **Q26. Did you admit that the Project would result in an adverse impact from wind speed**  
13 **increases in Docket 8302?**

14 A26. No. On Page 25 of his report, Raphael states:

15 “In the initial Chelsea Solar Case Order Docket 8302, p20, the applicants admitted that  
16 there would be an adverse impact from wind increases due to the loss of forest vegetation.”

17 This is a gross mischaracterization of something that I said at the July 16, 2015 technical hearing  
18 in Docket 8302. Page 20 of the February 16, 2016 final order in Docket 8302 states:

19 “60. After assessing: (1) the low average wind speed for the Bennington area, (2) the  
20 proximity to the Project site of other residences without forested windscreens, and (3) the  
21 time and cost of conducting a site-specific wind analysis, Chelsea determined that while  
22 there might be some adverse impact created by the wind after the site was deforested, that

1           adverse impact would not be undue. Therefore, Chelsea decided not to commission a wind  
2           study. Tr. 7/16/15 at 56-57 (Wilson).”

3   My complete comments on the topic of wind speeds at the July 16, 2015 technical hearing can be  
4   referenced on Pages 52 through 59 of the technical hearing transcript in Docket 8302. Nowhere  
5   in the final order does it state that I admitted there **would be** an adverse impact from wind, as  
6   Raphael claims. ‘Might be’ and ‘would be’ are very different statements. Furthermore, Raphael’s  
7   statement seems to completely ignore the fact that, since my comments at the 8302 technical  
8   hearing, the Petitioner has submitted an abundance of evidence regarding wind speed effects via  
9   the qualified expert analysis and testimony of Scott Reynolds in this case. Reynolds’ in-depth and  
10   unrefuted analysis of the topic concludes that the Project would not result in any adverse effects  
11   regarding wind speed.

12

13   **Q27. Did the Petitioner claim that while the extent of visibility is not large, the clearing**  
14   **associated with the Project will be noticeable?**

15   A27. No. On Page 27 of his report, Raphael states:

16           “[T]he applicant admits that the project will be visible: ‘While the extent of visibility is not  
17           large, the clearing associated with the Project will be noticeable’ (Exhibit CS-BW-43,  
18           testimony of Mark Kane, page 4).”

19   *Exhibit CS-BW-43* is the June 19, 2014 prefiled testimony of Mark Kane in Docket 8302. While  
20   this document continues to be an item of evidence in this case, it is clear that Kane’s statement on  
21   page 4 is in reference to the original 2014 Project design. Kane has made no such statement in his  
22   more recent analysis of the current revised Project design. Quite the opposite, Kane has stated that

1 the Project will not be visible from the adjacent highway roadways (which were the focus of the  
2 2014 statement quoted by Raphael).

3

4 **Q28. Please discuss the mitigation plantings shown within the Route 7 highway right of**  
5 **way.**

6 A28. On Page 27 of his report, Raphael takes issue with certain mitigation plantings shown on  
7 the landscaping mitigation plan for the Project (Sheet CS-02 of *Exhibit CS-MK-3*). The plantings  
8 in question (the “plantings”) are 14 pine trees shown planted near the southern boundary of the  
9 Project Site, upon land owned by the State of Vermont for the Route 7 highway right of way.  
10 Raphael criticizes these plantings for not being under the control of the Petitioner. He argues the  
11 plantings could be removed by the State at any time, and therefore the screening they provide  
12 cannot be guaranteed for the life of the Project. He argues that this is a deficiency in the mitigation  
13 plan proposed for the Project. Raphael’s criticism is misguided for a number of reasons. The  
14 plantings were an element of the landscaping plan for the original site design of the Project in  
15 Docket 8302. The plantings were added by the Petitioner because they were requested by Jean  
16 Vissering (“Vissering”), the original aesthetics expert for the Department of Public Service (the  
17 “Department”) for the Project. The plantings were agreed to as a stipulation in the Department’s  
18 MOU with the Petitioner in Docket 8302, and Vissering and the Department were fully aware that  
19 no guarantees were being made or could be made regarding the long-term existence of those  
20 plantings. Raphael does not seem to be aware of this. The Petitioner kept the plantings in the  
21 mitigation plan for the current revised Project design so as not to remove a mitigating element that  
22 had already been agreed to in the MOU with the Department. However, because the current

1 revised design for the Project greatly increased the size of the southern retained existing vegetation  
2 buffer, I am confident stating that the plantings essentially serve no purpose now and their removal  
3 would have no effect whatsoever on the screening of the Project in that direction.

4

5 **Q29. Is the “visual gateway” language in the Town Plan a clear, written community**  
6 **standard and is the Project located directly within a visual gateway?**

7 A29. No. The “visual gateway” language in the Town Plan is not a clear, written community  
8 standard. See the February 16, 2016 Order in Docket 8302 (“Ms. Harris also asserts that the Town  
9 Plan “visual gateway” language is a clear, written community standard. We disagree.”) Nor is  
10 the Project located within a “visual gateway.” See the [rebuttal] testimony of Mark Kane and  
11 Michael Buscher dated August 10, 2018 which addresses Raphael’s and Monks’ claims that the  
12 Project Site is located in a visual gateway.

13

14 **Q30. Is the ER Bennington I Solar Project located directly within a visual gateway in the**  
15 **Town of Bennington?**

16 A30. Yes. The ER Bennington I Solar Project (PUC Docket No. 16-0044-NMP) (the “ER  
17 Bennington Project”) is located along Route 7 in Bennington. The ER Bennington Project is a 500  
18 kW (AC) commercial-scale ground-mounted photovoltaic solar electric generation facility. I have  
19 visited the ER Bennington Project in person. Photos of the ER Bennington Project were submitted  
20 previously as *Exhibit CS-BW-22*, and I have previously discussed the ER Bennington Project in  
21 the Original Wilson PFT (Question 21 beginning on Page 17). The ER Bennington Project is  
22 plainly visible from Route 7. In fact, in its final order approving the ER Bennington Project, the

1 PUC found that “direct views” of the ER Bennington Project would exist along Route 7. The ER  
2 Bennington Project was reviewed and approved under a more recent version of the Town Plan than  
3 the version that applies to the Project, but both versions contain nearly identical language regarding  
4 visual gateways. The PUC issued a final order for the ER Bennington Project on October 19, 2016  
5 which found that the ER Bennington Project did not unduly interfere with orderly development of  
6 the region, that the Bennington Town Plan contained no land conservation measures applicable to  
7 the ER Bennington Project, and that the ER Bennington Project would not result in an undue  
8 adverse impact on aesthetics. The Town worked collaboratively with the developer of the ER  
9 Bennington Project (Encore Renewable Energy) to site and design the ER Bennington Project.  
10 The Town was well aware of the ER Bennington Project’s location, scale, appearance, and  
11 proposed amount of visual mitigation (which is orders of magnitude less than the visual mitigation  
12 that has been proposed for the Chelsea Solar Project). On March 14, 2016, the Bennington Select  
13 Board voted unanimously to approve and support the ER Bennington Project. On March 31, 2016,  
14 the Town sent a letter of support stating that the Town believes the ER Bennington Project to be  
15 in compliance with the Town Plan. A copy of this letter was included as an exhibit in Encore’s  
16 CPG petition for the ER Bennington Project. A copy of this letter is also included here as *Exhibit*  
17 *CS-BW-90*. It should also be noted that the Town entered into an agreement with Encore, which  
18 was financially beneficial to the Town, for the Town to purchase net-metering credits at a discount  
19 from the ER Bennington Project. The ER Bennington is important in this case because of its  
20 location in a visual gateway in the Town. In his report, Raphael devotes a significant amount of  
21 text (Pages 7, 8, 11, 22-26, 32-35) to his claim that the Project Site is located in a visual gateway  
22 and that the Town Plan and Town Scenic Resources Inventory contain special protections for

1 visual gateways that are contravened by the Project. The June 22, 2018 Prefiled Testimony of Dan  
2 Monks in this case also contains similar arguments (Pages 3-5, 8-9). Testimony submitted by  
3 Mark Kane and Michael Buscher in this case will address Raphael's and Monks' claims that the  
4 Project Site is located in a visual gateway (it is not). Testimony submitted by Mark Kane and  
5 Michael Buscher in this case will also address Raphael's and Monks' claims that the visual  
6 gateway language in the Town Plan and Scenic Resource Inventory rises to the level of a clearly  
7 written community standard (it does not). I offer this information regarding the ER Bennington  
8 Project as an example of how the Town has previously treated a commercial-scale solar facility  
9 located directly in a visual gateway. First, there is no question that the ER Bennington Project is  
10 located directly in a visual gateway. Please reference Page 22 of the Town's Scenic Resource  
11 Inventory (*Exhibit CS-BW-24*). Page 22 displays various photos of visual gateways in the Town.  
12 One of these photos has the caption, "The Town should seek opportunities to enhance the southern  
13 gateway to Bennington." The parcel of land shown on the right-hand side of this photo is the site  
14 of the ER Bennington Project, making it clear that the Scenic Resource Inventory identifies the  
15 site of the ER Bennington Project as a visual gateway. Second, the ER Bennington Project is  
16 clearly and directly visible in its entirety to vehicles traveling north on Route 7 (see photos, *Exhibit*  
17 *CS-BW-22*). By comparison, the Chelsea Solar Project is designed without any visibility to  
18 vehicles traveling south on Route 7. The Town fully and enthusiastically supported the  
19 development of the ER Bennington Project. In the absence of clearly defined development  
20 standards for visual gateways, the ER Bennington Project is the clearest possible indicator as to  
21 how the Town treats the siting of a commercial-scale solar project in a visual gateway. Raphael's

1 and Monks’ visual gateway arguments against the Chelsea Solar Project are not supported by the  
2 history and circumstances of the ER Bennington Project.

3

4 **Q31. Is maintenance of large blocks of productive forest lands a goal or purpose of the**  
5 **Rural Conservation District?**

6 A31. No. On Page 35 of his report, Raphael states:

7 “The maintenance of large blocks of productive forest lands – also a town, and indeed state  
8 goal, is another principle which this project does not support.”

9 Raphael’s argument against the Project here is misguided with respect to the RCON district. The  
10 Town Plan does establish a land use district specifically for the purpose of maintaining forest lands  
11 and that portion of the Town Plan is the appropriately named Forest District. The Project Site is  
12 not located in the Forest District. “Maintenance of large blocks of productive forest lands” is not  
13 a goal or purpose of the Rural Conservation District where the Project Site is located. Furthermore,  
14 the Project Site is not a large block of productive forest land. The Project Site is not within a large  
15 block of forest land, as it is a 27 acre parcel surrounded on almost every side by significant clearing  
16 and development. The Project Site is also not productive forest land. It is an abandoned open  
17 pasture that has been left to grow up in low-quality trees and invasive species over the past few  
18 decades. Further, the condition of the ‘forest’ on the Project Site and the appropriateness of the  
19 Project Site for solar is highlighted in an email by Bennington Select Board Vice Chair, Don  
20 Campbell, to intervenor Libby Harris, a copy of which was provided by Harris:

21 “the lot is small, there is no river or lake to protect, the forest is in terrible condition (basal  
22 area is so low that it barely qualifies as forest in many places and it is rife with invasives),

1 it does not connect to other conserved lands, it is not part of an animal corridor, it does not  
2 provide significant public access, it is not high quality farm land nor is it suitable for low-  
3 income housing, and it is not tribal or cultural heritage land.” (*Exhibit CS-BW-17*)  
4

5 **Q32. Have you reviewed the June 22, 2018 testimony and associated exhibits of Dan Monks**  
6 **in this docket?**

7 A32. Yes. Monks’ testimony and exhibits deal primarily with the topics of aesthetics and orderly  
8 development of the region. Mark Kane and Michael Buscher will file rebuttal testimony in  
9 response to Monks’ analysis. There are also some elements of Monks’ testimony that I will  
10 respond to in the answers directly below.  
11

12 **Q33. Does Monks discuss the topic of visual gateways?**

13 A33. Yes. Similar to Raphael, Monks discusses the topic of visual gateways on Pages 3-5 and  
14 8-9 of his testimony. On Page 9, Monks states: “The Town Plan calls for the protection and  
15 enhancement of visual gateways in town, including points of transition along a public highway,  
16 where significant visual elements of the town’s landscape first appear. As explained in my earlier  
17 testimony, the proposed Project contravenes these standards.” My earlier response to Questions  
18 29 and 30 regarding the Town’s visual gateways and the ER Bennington I Solar Project also applies  
19 to Monks’ comments regarding visual gateways.  
20

21 **Q34. Will the Project create an undue adverse impact on the public health and safety?**

22 A34. No. On Page 5 of his testimony, Monks states that:

1 “the Selectboard recommends that the certificate of public good be denied for the Project  
2 because the Project would have an undue adverse impact on [...] the public health and  
3 safety.”

4 Monks also claims on Page 5 of his testimony that the Project:

5 “would create significant [...] safety [...] impacts, which would involve Route 7, Route  
6 279, and the Bennington Welcome Center, where the general public would be directly  
7 affected.”

8 Monks also claims on Page 6 of his testimony that the Project:

9 “will inevitably cause damage to the [...] safety [...] values of the natural and historical  
10 surroundings around the Project site.”

11 Monks’ statements are made without any reasoning or supporting evidence, and I disagree with  
12 his claims. I have previously addressed the topic of public health and safety in my November 27,  
13 2017 prefiled testimony (Question 32, Page 22). The Project will **not** result in an undue adverse  
14 impact on the public health and safety.

15

16 **Q35. Does the Project share infrastructure with the adjacent proposed Apple Hill Solar**  
17 **Project?**

18 A35. No. On Page 6 of his testimony, Monks states:

19 “It appears based on the submissions from Petitioner that the Apple Hill Solar and Chelsea  
20 Solar projects do share infrastructure [...]”

21 Monks does not describe what infrastructure is allegedly shared between the Chelsea Solar and  
22 Apple Hill Solar projects, but his statement is incorrect, regardless. The Chelsea Solar Project and

1 the adjacent proposed Apple Hill Solar Project do not share any infrastructure. There is no overlap  
2 between the projects' perimeter fencelines, solar module arrays, central equipment areas, electric  
3 grid interconnections, or access driveways. Being located on different sections of the same parcel  
4 of land does not equate to shared infrastructure. The two projects are independent from each other,  
5 and each is technically distinct.

6

7 **Q36. Is it accurate to state that the viewpoint of the Bennington Select Board regarding the**  
8 **Project reflects the opinions of the citizens of the Town of Bennington?**

9 A36. No. On Page 6 of his testimony, Monks states:

10 "The Selectboard opposes the Chelsea Solar Project solar array, as proposed, which  
11 viewpoint reflects the opinions of the citizens of the Town of Bennington."

12 The language used by Monks in this statement gives the impression that the Select Board's view  
13 of the Project is shared by all, or at least a majority of, the citizens of Bennington. A more accurate  
14 version of the statement would be, "[...] which viewpoint reflects the opinions of *some* of the  
15 citizens of the Town of Bennington." I have personally attended, watched video footage of, or  
16 read the minutes of every Select Board meeting where Bennington citizens have ever commented  
17 in opposition to the Project. Apart from citizens who are members of the Apple Hill Homeowners  
18 Association, I am confident stating that fewer than 20 other citizens have ever commented against  
19 the Project at Select Board meetings. For a community with a population of approximately 15,000,  
20 these numbers do not seem to indicate a widespread community concern. I allow that there has  
21 likely been communication between citizens and the Select Board (or Town staff) of which I am  
22 not aware, but I don't believe there is any evidence that the average Bennington citizen is even

1 familiar with the Project, much less opposed to it. Furthermore, in early August 2017, I directed  
2 a Vermont market outreach consultant to carry out a canvassing survey of Bennington residents  
3 on the topic of the Project. In total, our canvassers knocked on 1,608 doors in Bennington and  
4 asked residents to share their view of the Project (along with the adjacent proposed Apple Hill  
5 Solar Project). 117 respondents indicated support of the Project. 46 respondents indicated  
6 opposition to the Project. 100 respondents indicated undecided or no opinion about the Project.  
7 For the remaining 1,345 doors, there was either no answer or no desire to speak with the canvasser.  
8 The survey was discontinued after 1,608 total doors just prior to the Bennington Select Board's  
9 meeting on August 14, 2017. The survey results were sent to Monks and the Select Board prior to  
10 that meeting. This was an informal door-to-door survey. I don't claim the survey was performed  
11 to any particular scientific standards, and I don't claim these survey responses can be statistically  
12 applied to the entire community of Bennington citizens. But I do believe this information casts  
13 doubt on Monks' claim that the Select Board's viewpoint regarding the Project is shared by all, or  
14 a majority of, the citizens of Bennington.

15

16 **Q37. Does the Project employ the same color of solar modules as those that are used at the**  
17 **Paper Mill Project?**

18 A37. Yes. On Page 7 of his testimony, Monks states:

19 "The Town Plan requires development to employ earth tone colors and non-reflective  
20 materials [in the RCON district]."

21 Monks goes on to criticize the Project's proposed use of monocrystalline solar modules because  
22 they have black-colored solar cells (as opposed to the more common blue-colored cells in

1 polycrystalline solar modules). Monks argues that the black-colored monocrystalline solar  
2 modules are not earth-tone in color. However, the black-colored monocrystalline solar modules  
3 proposed for the Project are the same type that are used at the Paper Mill Project. See my earlier  
4 discussion of the Paper Mill Project in response to Question 13, above. I have been to the Paper  
5 Mill Project in person and observed that the Paper Mill Project uses monocrystalline solar modules.  
6 The monocrystalline modules are also evident in the photos of the Paper Mill Project (*Exhibit CS-*  
7 *BW-21*). As I discussed earlier, the Town fully supported the Paper Mill Project in the RCON  
8 district. The Town took no issue with the color of the Paper Mill Project's solar modules.

9  
10 **Q38. Does the Project employ solar modules with similar reflectivity to those used at the**  
11 **Kobelia Project and the Paper Mill Project?**

12 A38. Yes. On Page 7 of his testimony, Monks states:

13 "The Town Plan requires development to employ earth tone colors and non-reflective  
14 materials [in the RCON district]."

15 Monks goes on to criticize the Project's proposed use of solar modules with low reflectivity  
16 qualities. Monks argues that photovoltaic solar modules are "by definition not non-reflective."  
17 However, the solar modules proposed for the Project would have similar reflectivity qualities to  
18 the modules used at the Kobelia Project and the Paper Mill Project. See my earlier discussions of  
19 the Kobelia Project in response to Question 12; the Paper Mill Project in response to Question 13.  
20 As I discussed earlier, the Town (1) did not oppose the Kobelia Project and (2) fully supported the  
21 Paper Mill Project. These solar projects are located in the RCON district. The Town took no issue  
22 with the reflectivity of the solar modules for any of these three projects.

1 **Q39. Is the Project Site in direct line of sight from the Bennington Battle Monument?**

2 A39. No. On Page 8 of his testimony, Monks claims that the Project Site is in direct line of sight  
3 from the Bennington Battle Monument. I disagree. The topic of Project Site visibility from the  
4 Battle Monument has been a frequent element in the arguments of Project opponents in this case,  
5 so I think it is important to provide accurate information on this topic. Mark Kane discusses the  
6 Project Site visibility from the Battle Monument beginning on Page 10 of his *Exhibit CS-MK-2*.  
7 Kane concludes that the Project Site is not visible from the grounds of the Battle Monument and  
8 that the potential visibility of the Project Site from the observation windows in the Battle  
9 Monument is slight. Even more information is useful to fully understand just how slight the  
10 potential visibility of the Project Site really is. I have visited the Battle Monument in person. I  
11 agree with Kane that the Project Site is not visible from the grounds. On the observation level, a  
12 specific series of actions must be taken by a viewer in order to have any visibility of the Project  
13 Site. First, one of the glass windows must be opened. Second, a viewer must lean their body out  
14 of the open window. Third, a viewer must turn their head to one side. Only then would the Project  
15 Site be visible through an inches-narrow opening between two stone columns. A photo of this  
16 view of the Project Site was included in Figure 3 of Exhibit AHS-MK-2 in Docket 8454 (Apple  
17 Hill Solar). I did not take that photo, but I can confirm its accuracy after my own visit to the  
18 observation level of the Battle Monument. For reference, I have excerpted that figure and included  
19 it here as *Exhibit CS-BW-91*. Special and unusual steps must be taken to have any view  
20 whatsoever of the Project Site from the Battle Monument. I do not believe it is likely that an  
21 average visitor would take these steps. Given these factors, I disagree with Monks' claim that the

1 Project Site is in a direct line of sight from the Battle Monument. The Project Site is not in a direct  
2 line of sight from the Battle Monument.

3

4 **Q40. Did the Bennington Select Board take a different position in regards to the Project**  
5 **than the position it took in regards to the Apple Hill Solar Project?**

6 A40. Yes. I discussed the position taken by the Select Board in regards to the Apple Hill Project  
7 at its August 14, 2017 meeting in Question 15, above. Based on a recommendation by the Town  
8 attorney, the Select Board voted to discontinue its opposition to the Apple Hill Project in response  
9 to a revised site plan that had been presented for that project (see *Exhibit CS-BW-12*, Page 13,  
10 Line 21). The Town attorney recommended that he did not think the revised site plan for the Apple  
11 Hill Project, “has the same problems under the Town Plan as the original [site plan for Apple Hill]”  
12 (*Exhibit CS-BW-12*, Page 19, Line 8). The Town attorney highlighted the revisions to the Apple  
13 Hill Project as reasons for his recommendation (*Exhibit CS-BW-12*, Pages 10 through 12), which  
14 makes sense because those revisions came about partially as a result of discussions with the Town  
15 about the changes they wanted to see. The revised site plan for the Chelsea Project includes all of  
16 those same revisions. However, at its meeting on November 27, 2017, the Select Board voted to  
17 oppose the revised site plan for the Chelsea Project. I am aware that, at that time, the members of  
18 the Select Board were under the impression that a more recent version of the Town Plan applied  
19 to revised site plan for the Chelsea Project than the version applicable to the Apple Hill Project.  
20 However, now that it has been clarified that the same version of the Town Plan applies to both the  
21 Chelsea Project and the Apple Hill Project, the Select Board’s continued opposition to the Chelsea  
22 Project seems to stand in direct contradiction to the position it took Apple Hill Project.

1 **Q41. Did the Bennington Select Board vote to oppose the Project based on false**  
2 **information?**

3 A41. Yes. On August 13, 2015, the Bennington Select Board voted to oppose the Project and to  
4 request that the PUC “halt the [Project] because of [its] inevitable damage to the environmental  
5 safety, visual, and aesthetic values of the natural and historical surroundings.” The Select Board  
6 voted again at their October 12, 2015 meeting to send a letter to the PUC strongly stating its  
7 opposition to the Project (as well as the adjacent proposed Apple Hill Solar Project). A copy of  
8 this letter is included as *Exhibit CS-BW-92*. This decision applied to both the Project as well as  
9 the proposed adjacent Apple Hill Solar Project. This August 13, 2015 meeting was the beginning  
10 of the Bennington Select Board’s ongoing opposition to the Project. At this meeting, the Select  
11 Board was briefed on the Project by Richard Carroll, a witness for Libby Harris in this case.  
12 Carroll presented the Select Board with a single 3D simulation showing both the Project and the  
13 proposed adjacent Apple Hill Solar Project. The simulation presented by Carroll was a version  
14 that was devoid of any of the visual mitigation elements that had been proposed for the Project at  
15 that time, including retained existing vegetation and supplemental landscaping plantings. That  
16 simulation had been created at the request of the Department of Public Service in order to show  
17 the locations of the Project and the Apple Hill Solar Project together. Carroll had not reviewed  
18 the complete set of evidence filed by the Petitioner for the Project, including the aesthetics report  
19 of Mark Kane. This was confirmed by Carroll at the August 18, 2015 technical hearing for the  
20 Apple Hill Solar Project (see Pages 21-22, 46-47, and 131-132 of the transcript for that hearing,  
21 which is included here as *Exhibit CS-BW-93*). The Petitioner was not notified of this Select Board

1 meeting or given an opportunity to participate or respond. Prior to the August 13, 2015 meeting,  
2 the Select Board had not previously taken a position regarding the Project.

3

4 **Q42. Have you reviewed the June 22, 2018 testimony and associated exhibits of Libby**  
5 **Harris in this docket?**

6 A42. Yes. Harris' testimony and exhibits deal primarily with private property issues and topics  
7 related to aesthetics and natural resources. I will respond to some elements of Harris' testimony  
8 in the answers directly below.

9

10 **Q4431 Did Chelsea Solar propose an agreement for shared driveway maintenance costs to**  
11 **Harris?**

12 A43. No. The driveway maintenance agreement that Harris references on page 4 of her  
13 testimony was proposed by PLH, LLC ("PLH"), which is not the same entity as Chelsea Solar.  
14 However, it is true that PLH owns the Project Site and is currently a company under common  
15 ownership with Chelsea Solar. The agreement in question covered the sharing of maintenance  
16 costs between Harris and PLH for a gravel driveway that could be used by both parties to access  
17 Apple Hill Road from private properties. I do not believe an agreement to share maintenance costs  
18 of a private driveway (that is not an element of the Project) would be relevant to the PUC in this  
19 proceeding. However, Harris appears to use her testimony about the agreement as a means to  
20 attack the character of the Petitioner, so I will respond. Harris is correct that PLH sent her a  
21 proposed agreement to split the maintenance costs of the shared driveway in March of 2015. Harris  
22 is also correct that this initial draft included certain terms related to her intervention in PUC docket

1 numbers 8302 and 8454. Harris did not prefer those terms, and she declined to accept the  
2 agreement as originally proposed, which is her right. To date, PLH has yet to receive a counter-  
3 proposal from Harris. Beginning in late 2016 and continuing through February 2017, I left  
4 multiple messages for Harris in an attempt to contact her to discuss her concerns about the Chelsea  
5 Solar Project and the Apple Hill Solar Project, as well as the unresolved driveway agreement. A  
6 number of my messages specifically mentioned the driveway agreement. Harris did not respond  
7 to any of these attempts, which is her right. On February 23, 2017, Harris filed a response to  
8 Chelsea Solar's request for mediation in PUC Docket No. 8302. In this response, Harris indicated  
9 that she considered my attempts to contact her to be inappropriate "badgering". This was the first  
10 indication we had received from Harris that she did not want to be contacted, and I ceased my  
11 attempts immediately thereafter. Since that time, PLH has received no contact from Harris  
12 requesting a reopening of discussions about the driveway agreement. I maintain that the driveway  
13 agreement is not relevant to this proceeding, but I believe these facts are important to have on the  
14 record if Harris' testimony regarding the driveway agreement is to be considered.

15

16 **Q44. Are deed restrictions on the 'orchard parcel' adjacent to the Project Site relevant to**  
17 **any criteria under 30 V.S.A § 248?**

18 A44. No. On Page 4 of her testimony, Harris argues against the Project by stating that the  
19 orchard parcel adjacent to the Project Site carries certain deed restrictions that would be violated  
20 if the Project is approved. Block makes a similar argument on Pages 7 and 8 of her own testimony.  
21 Both their contentions are incorrect, but in any event are irrelevant because there is no longer a  
22 proposed alternate design for the Project that included a gravel driveway across the orchard parcel.

1 The landscaping planting plan for the Project shows some screening vegetation to be planted on  
2 the orchard parcel (solely for the benefit of Harris). On Page 7 of her testimony, Harris argues that  
3 this landscaping would violate the orchard parcel deed restrictions. She is incorrect, but it is  
4 irrelevant because none of the review criteria under 30 V.S.A § 248 call for the Project to be  
5 evaluated against the language in a private property deed.

6

7 **Q45. Did the Petitioner send Harris a ‘Request to Permit Entry on Land?’**

8 A45. Yes. On Pages 5 and 6 of her report, Harris argues against the Project by criticizing the  
9 ‘Request to Permit Entry on Land’ that the Petitioner sent to her on June 18, 2018. Harris states  
10 that:

11 “The ostensible purpose [of the request] is to take photographs in order to do photographic  
12 simulations.”

13 Harris is correct; that is one of the reasons the Petitioner requested access to Harris’ property.  
14 Throughout the long history of this case, Harris has (1) stated her concern about the view from her  
15 property, (2) claimed the screening plans for the Project are inadequate, and (3) claimed that the  
16 3D renderings meant to simulate the view from her property are inadequate. We have never been  
17 allowed access to Harris’ property, despite having made multiple requests to Harris for permission.

18 On Page 6 of her testimony, Harris states:

19 “Had Mark Kane contacted me earlier in this process I would have found the request to be  
20 reasonable.”

21 On July 5, 2017 (emphasis 2017, not 2018), the Petitioner offered exactly that; to bring Mark Kane  
22 to Harris’ property to meet with Harris to discuss the view from her property and the proposed

1 landscaping plan. Kane would have also collected first-hand information (including photographs)  
2 about the view from Harris' property. Harris refused, which is her right. However, as Harris has  
3 continued to argue that the Petitioner's evaluation of the potential view from her property is  
4 inadequate, the Petitioner did send a formal request for access to Harris' property. Harris has not  
5 responded to the request.

6

7 **Q46. Has the Petitioner addressed Harris' concerns about wind speed?**

8 A46. Yes. On Page 6 of her testimony, Harris claims her concern about the potential for  
9 increased wind speeds is an issue that has not been addressed by the Petitioner. We took Harris'  
10 concern on this topic seriously and retained Scott Reynolds, a qualified expert in the field of air  
11 flow dynamics, to perform an in-depth technical analysis on the topic of wind speed impacts near  
12 the Project Site. Reynolds' testimony in this docket speaks for itself. We have addressed this  
13 concern of Harris' by demonstrating via expert analysis that the Project will not result in adverse  
14 wind speed impacts.

15

16 **Q47. Has the Petitioner addressed Harris' concerns about highway traffic noise?**

17 A47. Yes. On Page 6 of her testimony, Harris claims her concern about the potential for  
18 increased highway traffic noise is an issue that has not been addressed by the Petitioner. We took  
19 Harris' concern on this topic seriously and retained Ryan Haac, a qualified expert in the field of  
20 acoustics, to perform an in-depth technical analysis on the topic of highway traffic noise impacts  
21 near the Project Site. Haac's testimony in this docket speaks for itself. We have addressed this

1 concern of Harris’ by demonstrating via expert analysis that the Project will not result in unduly  
2 adverse highway traffic noise impacts.

3

4 **Q48. Is there reason to believe that increased vehicle exhaust pollution in the Apple Hill**  
5 **Neighborhood will be an unduly adverse effect of the Project?**

6 A48. No. The overall societal benefits of the Project from a greenhouse gas perspective are set  
7 forth in the prefiled testimony of Harnoor Dhaliwal in this docket. However, on Page 7 of her  
8 testimony, Harris states:

9 “another consequence of the taking down of many acres of trees will be increased air  
10 pollution from traffic since trees absorb air pollution.”

11 Lora Block makes a similar claim on Pages 4 and 7 of her own testimony. I am familiar with this  
12 argument by Harris and Block. Harris and Block have not offered any evidence in support of their  
13 claims. I cannot identify any reasonable basis for Harris’ claim. Moreover, Harris’ and Block’s  
14 claims are contradicted by their claims regarding wind. Whatever vehicle exhaust might reach the  
15 Apple Hill neighborhood would likely be quickly dispersed and taken away from the Apple Hill  
16 neighborhood by wind. Lastly, with respect to air pollution in general, the Project provides a  
17 substantial greenhouse gas benefit by displacing fossil fuels as demonstrated in detail in the  
18 prefiled testimony of Harnoor Dhaliwal in this docket.

19

20

21

1 **Q49. Have you reviewed the June 22, 2018 testimony and associated exhibits of Lora Block**  
2 **in this docket?**

3 A49. Yes. Block's testimony and exhibits deal primarily with topics of related to aesthetics and  
4 natural resources. I will respond to some elements of Block's testimony in the answers directly  
5 below.

6

7 **Q50. Does Block mention a number of the same concerns that Harris has described?**

8 A50. Yes. In her testimony, Block describes concerns about highway traffic noise (Pages 3-4),  
9 wind speeds (Page 4), and vehicle exhaust pollution (Pages 4-5). Block describes these concerns  
10 in similar fashion to how they have been described by Harris. My earlier responses to Harris on  
11 these topics also apply to Block's testimony; highway traffic noise (Question 48, above), wind  
12 speeds (Question 47, above), and vehicle exhaust pollution (Question 49, above).

13

14 **Q51. Do you agree with Block's characterization of the fence screening material that has**  
15 **been proposed for the Project?**

16 A51. No. On Page 5 of her testimony, Block states:

17 "Planting a huge box wrapped in plastic or poly sheeting in the Rural Conservation District  
18 on a prominent hillside will be an astonishing negative sight, out of character for the town  
19 and District."

20 Since the use of fence screening material was first proposed by the Petitioner as an element of the  
21 revised Project site plan, Block has used this 'huge box wrapped in plastic' language in a number  
22 of different communications regarding the Project. Harris echoes the same language on Page 8 of

1 her own testimony (“hundreds of solar panels encased in a large black box”). I disagree with  
2 Block’s and Harris’ attempts to characterize the proposed fence screening material as a harmful  
3 visual element. The fence screening material is a common tool for visual *mitigation*, and it was  
4 added to the revised Project site plan in response to feedback from the Town along with the  
5 Petitioner’s understanding that Project opponents (including Harris and Block) did not feel the  
6 screening originally proposed for the Project was sufficient. The material proposed for use is only  
7 partially opaque and allows both light and air to pass through so that the screening material does  
8 not create the appearance of a completely solid barrier. Although we have proposed the use of  
9 black-colored screening material, a dark green color is also available, and the Petitioner is more  
10 than willing to use that color instead if that would be the preference of the other parties in this case.  
11 Specifications of this type of screening material, as well as some photos of this type of screening  
12 material in use, are included as *Exhibit CS-BW-94*. Also, as Mark Kane has made clear in his  
13 own testimony, the fence screening material would be only one element of a multiple-method  
14 approach to visual mitigation for the Project. The fence screening material is not viewed directly  
15 from offsite locations; rather, it would be viewed if at all through layers of existing retained forest  
16 vegetation and/or supplemental landscaping planting. If Block or Harris would prefer the fence  
17 screening material not be used on fencing facing the direction of the Apple Hill Neighborhood, the  
18 Petitioner is willing to make that change to the Project’s design.

19

20 **Q52. Does the Project contravene the Town Plan because it is located in a visual gateway?**

21 A52. No. On Page 5 of her testimony, Block states:

1 “Planting a huge box wrapped in plastic or poly sheeting in the Rural Conservation District  
2 on a prominent hillside will be an astonishing negative sight, out of character for the town  
3 and District. That contravenes our Town Plan, which relates to the gateway area where the  
4 solar site is planned.”

5 Please refer to my earlier comments regarding visual gateways in Questions 29 and 30, above;  
6 these comments also apply to Block’s claim about a visual gateway.

7  
8 **Q53. Has the Petitioner failed to meet its burden of proof on the topics of aesthetics, wind  
9 and noise, wildlife, and air and water pollution?**

10 A53. No, the Petitioner has met its burden of proof on these topics in this case, although the PUC  
11 will ultimately make that determination. On Page 7 of her testimony, Block claims that the  
12 Petitioner has failed to meet its required burden of proof on a number of topics. The history of  
13 this case is long and complex, and over the years the Petitioner has submitted a robust set of  
14 evidence supporting that the Project complies with every required criterion under 30 V.S.A. § 248.  
15 I believe the Petitioner has gone ‘above and beyond’ by obtaining expert analysis on a number of  
16 topics that probably don’t require such lengths (highway noise, wind speed, PFOA), but  
17 nonetheless were pursued by the Petitioner in an attempt to address concerns that were allegedly  
18 important to Project opponents. Block may not approve of the conclusions that are supported by  
19 the Petitioner’s evidence in this case, but that does not mean that the Petitioner has failed to meet  
20 the required burden of proof.

21

22

1 **Q54. Will the Project contribute to diversification of the state’s energy portfolio, reduce**  
2 **global climate change caused by CO2 emissions, and protect air quality?**

3 A54. Yes. The Project will add a renewable energy facility to the state’s energy generation  
4 portfolio and will offset fossil-fuel based electricity production. See the prefiled testimony and  
5 report of Harnoor Dhaliwal in this docket for a lifecycle analysis of the greenhouse gas and air  
6 quality benefits provided by the Project. This is especially important in light of the recent final  
7 report of the Vermont Climate Action Commission, which states that “Vermont’s greenhouse gas  
8 emissions rose 10 percent in two years – 2014 and 2015” and that “If Vermont continues its current  
9 trajectory – with rising, not declining greenhouse gas emission – we will not meet [the State’s  
10 statutory greenhouse gas reduction goals and the State’s renewable energy target goals].”  
11 (*Vermont Climate Action Commission, Executive Order No. 12-17, Report to the Governor, July*  
12 *31 2018 – Cover Letter Page 1 and Report Page 2*). The Project contributes directly to these goals  
13 and, therefore, to the public good of the State of Vermont.

14

15 **Q55. Does this conclude your testimony?**

16 A55. Yes.